

IN THE CLAIMS:

Please cancel Claims 5 and 6 without prejudice or disclaimer of subject matter and amend the claims as shown below. The claims, as currently pending in the subject application, now read as follows:

1. (Currently Amended) A data transfer method between a first controller which controls an engine section for forming an image and a second controller which transmits image data to the first controller, wherein the engine section includes a nonvolatile memory,

wherein in an image forming operation mode of forming an image with the engine section, the method comprises:

notifying the second controller of a condition change of the engine section by the first controller, by changing a signal level of a report signal line from a first level to a second level, [[and]]

transmitting a condition request instruction by the second controller to the first controller via a data signal line, after the signal level is changed to the second level, in response to the notification of the condition change; and

transmitting condition information by the first controller to the second controller via the data signal line in response to the condition request instruction, after the signal level is returned to the first level; and

wherein in a rewrite mode of rewriting the nonvolatile memory, the method comprises:

transmitting a rewrite instruction by the second controller to the first controller via the data signal line, while the signal level is at the first level, transmitting rewrite data by the second controller to the first controller via the data signal line, ~~in accordance with after the signal level of the report signal line changed is changed to the first level~~ by the first controller in response to the rewrite instruction, and

rewriting the nonvolatile memory of the engine section by the first controller after the signal level is changed from the first level to the second level, by the rewrite data transmitted from the second controller.

2. (Cancelled)

3. (Currently Amended) The method according to claim 1, further comprising the steps of:

in the image forming operation mode, transmitting a condition of the engine section by the first controller to the second controller via a condition signal line in response to the condition request instruction; and

in the rewrite mode, transmitting the condition of the first controller by the first controller to the second controller via the condition data signal line, after the signal level is changed from the first level to the second level in accordance with the signal level of the report signal line.

4. (Previously Presented) The method according to claim 3, wherein the condition of the first controller is one of a data transfer error, an erase or rewrite operation result of the nonvolatile memory, and an end of the rewrite operation of the nonvolatile memory.

5. to 6. (Cancelled)

7. (Currently Amended) The method according to claim 1 [[6]], further comprising a step in the rewrite mode of determining that an error occurs ~~has occurred~~ in a ~~the~~ rewrite operation ~~in a case where a predetermined~~ ~~based on a~~ time period elapses before ~~before~~ the signal level of the report signal line is changed to the first level ~~after being~~ ~~changed to~~ ~~from~~ the second level.

8. (Previously Presented) The method according to claim 1, wherein the rewrite data is a control program code data.

9. (Cancelled)

10. (Original) The method according to claim 1, wherein the nonvolatile memory is a flash memory.

11. (Currently Amended) An image forming apparatus including a first controller which controls an engine section for forming an image and a second controller

which transmits image data to the first controller, wherein the engine section includes a nonvolatile memory, and wherein the image forming apparatus is configured to operate in an image forming operation mode of forming an image with the engine section, or a rewrite mode of rewriting the nonvolatile memory the apparatus comprising:

signal lines for communication between the first controller and the second controller, wherein the signal lines include a report signal line and a data signal line, wherein a signal level of the report signal line is changed by the first controller, and wherein the data signal line is for transmitting data from the second controller to the first controller;

means for, in the image forming operation mode, notifying the second controller of a condition change of the engine section by the first controller, by changing a signal level of the report signal line from a first level to a second level;

means for, in the image forming operation mode, transmitting a condition request instruction by the second controller to the first controller via a data signal line, after the signal level is changed to the second level in response to the notification of the condition change;

means for, in the image forming operation mode, transmitting condition information by the first controller to the second controller via the data signal line in response to the condition request instruction, after the signal level is returned to the first level;

means for, in the rewrite mode, transmitting a rewrite instruction by the second controller to the first controller via the data signal line while the signal level is at the first level;

means for, in the rewrite mode, transmitting rewrite data by the second controller to the first controller via the data signal line, in accordance with after the signal level of the report signal line ~~changed is changed to the first level~~ by the first controller in response to the rewrite instruction; and

means for, in the rewrite mode, rewriting the nonvolatile memory of the engine section by the first controller after the signal level is changed from the first level to the second level, by the rewrite data transmitted from the second controller.

12. (Cancelled)